

Amendments to the Claims:

The following listing of claims will replace all prior versions and listings of claims in the Application.

Listing of Claims:

Claim 1 (previously presented): An isolated and/or purified polynucleotide comprising:

- (a) a polynucleotide encoding a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 6;
- (b) a polynucleotide comprising a nucleotide sequence of SEQ ID NO: 1 or SEQ ID NO: 5;
- (c) a polynucleotide comprising the cDNA of deposit NCIMB 41074; or
- (d) a polynucleotide comprising a nucleotide sequence that has at least 95% identity to the polynucleotide of (a), (b), or (c), and which encodes a leukotriene receptor that is activated by leukotriene C4 or leukotriene D4.

Claim 2 (canceled).

Claim 3 (original): A vector comprising the polynucleotide of claim 1.

Claim 4 (previously presented): A host cell transformed or transfected with the polynucleotide of claim 1, wherein said host cell expresses said polynucleotide under conditions sufficient for expression.

Claim 5 (currently amended): A process for producing a polypeptide encoded by the polynucleotide of claim 1 comprising culturing, ~~the transformed/transfected host cell of claim 4~~ under conditions sufficient for expression, a host cell transformed or transfected with an isolated and/or purified polynucleotide comprising:

- (a) a polynucleotide encoding a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 6;
- (b) a polynucleotide comprising a nucleotide sequence of SEQ ID NO: 1 or SEQ ID NO: 5;
- (c) a polynucleotide comprising the cDNA of deposit NCIMB 41074; or
- (d) a polynucleotide comprising a nucleotide sequence that has at least 95% identity to the polynucleotide of (a), (b), or (c), and which encodes a leukotriene receptor that is activated by leukotriene C4 or leukotriene D4.

Claim 6 (previously presented): A membrane preparation of a cell transformed or

transfected with

- (a) a polynucleotide encoding a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 6;
- (b) a polynucleotide comprising a nucleotide sequence of SEQ ID NO: 1 or SEQ ID NO: 5;
- (c) a polynucleotide comprising the cDNA of deposit NCIMB 41074; or
- (d) a polynucleotide comprising a nucleotide sequence that has at least 95% identity to the polynucleotide of (a), (b), or (c), and which encodes a leukotriene receptor that is activated by leukotriene C4 or leukotriene D4 wherein the polypeptide encoded by said polynucleotide is contained in said membrane preparation.

Claims 7-21 (canceled).

Claim 22 (original): A microorganism as deposited under the accession number NCIMB 41074 at the National Collections of Industrial and Marine Bacteria Ltd.

Claim 23 (canceled).

Claim 24 (previously presented): An isolated and/or purified polynucleotide encoding a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 6.

Claim 25 (previously presented): An isolated and/or purified polynucleotide comprising SEQ ID NO: 1 or SEQ ID NO: 5.

Claim 26 (previously presented): An isolated and/or purified polynucleotide comprising the cDNA of deposit NCIMB 41074.

Claims 27-32 (canceled).

Claim 33 (previously presented): A vector comprising the polynucleotide of any one of claims 24-26.